

Research

Shedding light on
the situation...



“...the effective,
creative, and wise use
of technology...”

FEHRINGER

Importance of plan

- Plan your work and work your plan!
- Fail to plan? Then plan to fail!
- Instead of changing your plan, plan for change...
- Research is a flexible anchor and guide to the future...



How about for your students?

Importance of plan

- Your portal into their mind; standards?
- Best chance for you to guide their project
- Independent of software/hardware
- Common reference for you, them, parents
- Great way to gauge process



How about research process?

Basic research process

1. Ask a question
2. Determine data to collect in order to answer question
3. Determine methodology for collecting data
4. Collect data
5. Analyze data
6. Draw conclusions
7. Present results
8. Identify questions for further study

Research - handout

Research Step

Student Approach or Activity

1. Ask a question: _____
2. Determine data to collect in order to answer question: _____
3. Determine methodology for collecting data: _____
4. Collect data: _____
5. Analyze data: _____
6. Draw conclusions: _____
7. Present results: _____
8. Identify questions for further study: _____

Let's look at each one...

Research, step #1

Step 1: Ask a question

Considerations:

- scope, limitations - time, place
- meaningful to student?
- something they are “ready for” or within their reach?



Research, step #2

Step 2: Determine data

Considerations:

- **Qualitative, quantitative**
- **Collectible**
- **Relevant to the question**

Research, step #3

Step 3: Determine methodology

Considerations:

- What tools do you need/have?
- What else?

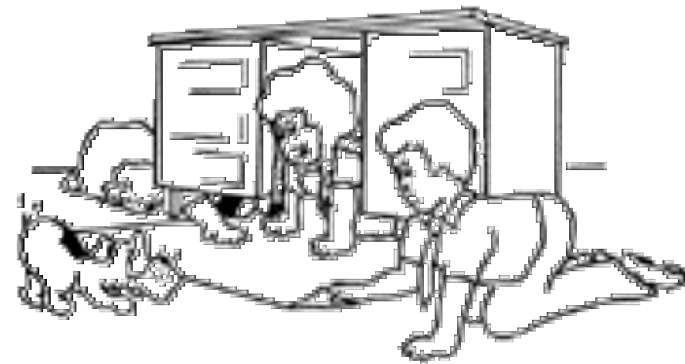


Research, step #4

Step 4: Collect data

Considerations:

- How are you going to store it?
- What else?



Research, step #5

Step 5: Analyze data

Considerations:

- How to use your measurements?
- Play with the data - what if?
- Ask questions, relate answers to next steps in understanding the situation...



Research, step #6

Step 6: Draw conclusions

Considerations:

- **Specifically address questions?**
- **Transferable?**
- **Explainable to others?**
- **What else have you learned?**
- **What new questions do you have?**

Research, step #7

Step 7: Present results

Considerations:

- Who is your audience?
- Objective? Trying to convince or just convey?
- Technology?



Research, step #8

Step 8: Call for further study

Considerations:

- What else would you like to know?
- What other research is needed?
- Who else should be involved?
- How can you build on what you've done?

